

Product Environmental Profile

Water Flow Switch





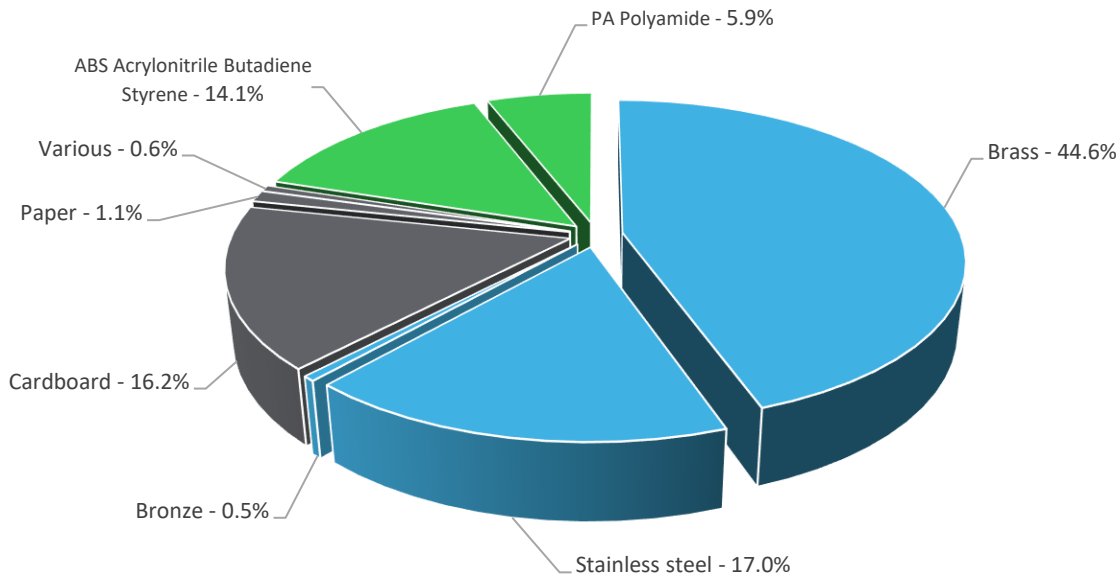
General information

Representative product	Water Flow Switch - CP-LI-FL-SW-BSP0
Description of the product	Liquid flow switch is a mechanical device which is driven by water flow to control switch closure by displacement of magnetic core.
Functional unit	<p>The liquid flow switch provides an alarm signal to the system to protect its normal operation. This function is ensured in accordance with the following parameters:</p> <p>Pipe connection: NPT/BSP Wire connection: Screw Electrical Rating: 250VAC 10A(R)/3A(L) Operation temp: 0C-110C IP53 in accordance with the standard IEC 60529</p>



Constituent materials

Reference product mass 528.1 g including the product, its packaging and additional elements and accessories



	Plastics	20.0%
	Metals	62.1%
	Others	17.9%



Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers – PBDE), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl phthalate– BBP, Dibutyl phthalate - DBP, Diisobutyl phthalate - DIBP) as mentioned in the Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

<http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page>

Additional environmental information

The Water Flow Switch presents the following relevant environmental aspects

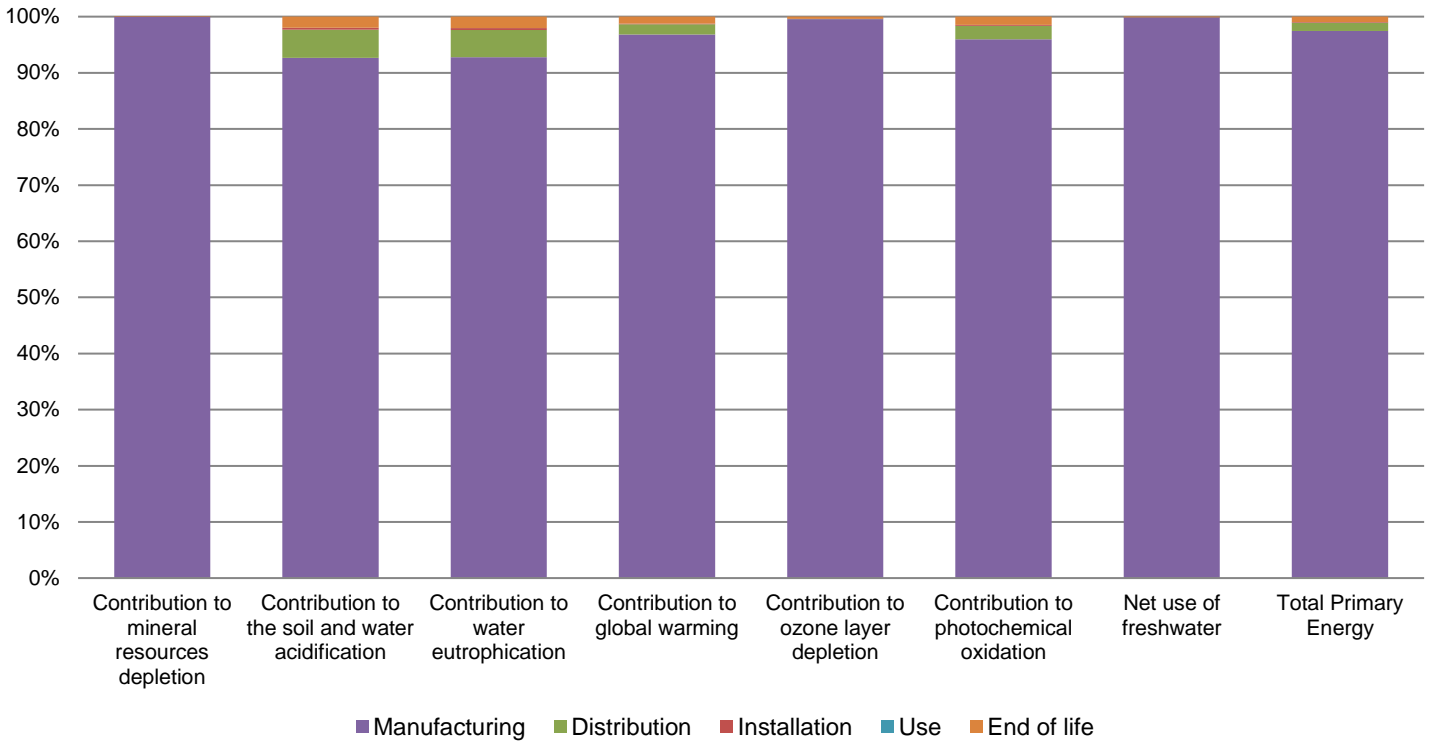
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 89.1 g, consisting of Cardboard(93.38%), paper(6.62%) Product distribution optimised by setting up local distribution centres
Installation	Ref CP-LI-FL-SW-BSP0 does not require any installation operations.
Use	The product does not require special maintenance operations.
End of life	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials No special end-of-life treatment required. According to countries' practices this product can enter the usual end-of-life treatment process. Recyclability potential: 78% Based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

Environmental impacts

Reference life time	10 years			
Product category	Other equipments - Active product			
Installation elements	No special installation components need during installation phase, but transport of packaging to disposal, and disposal of packaging accounted for during installation.			
Use scenario	This product is equivalent to a mechanical switch without electricity.			
Geographical representativeness	China			
Technological representativeness	Liquid flow switch is a mechanical device which is driven by water flow to control switch closure by displacement of magnetic core.			
Energy model used	Manufacturing	Installation	Use	End of life
	Energy model used: China	Electricity mix; AC; consumption mix, at consumer; 220V; CN	Electricity mix; AC; consumption mix, at consumer; 220V; CN	Electricity mix; AC; consumption mix, at consumer; 220V; CN

Compulsory indicators		Water Flow Switch - CP-LI-FL-SW-BSP0					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	3.12E-04	3.12E-04	0*	0*	0*	0*
Contribution to the soil and water acidification	kg SO ₂ eq	6.22E-03	5.76E-03	3.11E-04	2.01E-05	0*	1.24E-04
Contribution to water eutrophication	kg PO ₄ ³⁻ eq	1.49E-03	1.38E-03	7.17E-05	4.88E-06	0*	3.07E-05
Contribution to global warming	kg CO ₂ eq	3.78E+00	3.66E+00	6.81E-02	4.82E-03	0*	4.71E-02
Contribution to ozone layer depletion	kg CFC11 eq	6.66E-07	6.63E-07	1.38E-10	0*	0*	2.67E-09
Contribution to photochemical oxidation	kg C ₂ H ₄ eq	9.19E-04	8.82E-04	2.22E-05	1.50E-06	0*	1.33E-05
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m ³	6.12E-02	6.12E-02	0*	0*	0*	5.12E-05
Total Primary Energy	MJ	6.47E+01	6.31E+01	9.63E-01	6.30E-02	0*	6.20E-01

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Optional indicators		Water Flow Switch - CP-LI-FL-SW-BSP0					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	4.27E+01	4.12E+01	9.57E-01	6.25E-02	0*	4.98E-01
Contribution to air pollution	m³	1.83E+03	1.83E+03	2.90E+00	1.92E-01	0*	4.40E+00
Contribution to water pollution	m³	2.20E+02	2.03E+02	1.12E+01	7.31E-01	0*	4.87E+00
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1.05E-01	1.05E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.20E+00	1.19E+00	1.28E-03	0*	0*	6.93E-04
Total use of non-renewable primary energy resources	MJ	6.36E+01	6.19E+01	9.62E-01	6.29E-02	0*	6.19E-01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	8.47E-01	8.45E-01	1.28E-03	9.78E-05	0*	6.93E-04
Use of renewable primary energy resources used as raw material	MJ	3.48E-01	3.48E-01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	5.90E+01	5.73E+01	9.62E-01	6.29E-02	0*	6.19E-01
Use of non renewable primary energy resources used as raw material	MJ	4.59E+00	4.59E+00	0*	0*	0*	0*
Use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Waste categories	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	2.43E+01	2.38E+01	0*	0*	0*	5.20E-01
Non hazardous waste disposed	kg	1.53E+00	1.52E+00	2.42E-03	6.55E-04	0*	1.91E-03
Radioactive waste disposed	kg	7.06E-04	7.02E-04	1.72E-06	1.29E-07	0*	2.96E-06
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	4.73E-01	5.12E-02	0*	8.87E-02	0*	3.34E-01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	2.40E-03	0*	0*	0*	0*	2.40E-03
Exported Energy	MJ	2.82E-04	2.65E-05	0*	2.55E-04	0*	0*

* represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version EIME v5.9.3, database version 2020-12 in compliance with ISO14044.

The manufacturing phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

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Date of issue	12/2021	Supplemented by	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	Information and reference documents	www.pep-ecopassport.org
<i>Independent verification of the declaration and data</i>			
Internal	X	External	
<i>The elements of the present PEP cannot be compared with elements from another program.</i>			
<i>Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »</i>			

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